|  |  |
| --- | --- |
| **Electric Current**   |  | | --- | | The rate at which electrons move past a given point in a circuit every second Symbol used for current is I  Measured in units called Amperes (A) An ammeter is a device used to measure the current at a point in a circuit | |
|  |
| **Potential Difference (Voltage)** The electrical energy stored in the battery or energy source.  The potential of the electrons to do work as they pass from **–** to **+**  Cannot be used until the electric circuit is turned on or connected.  Symbol used for potential difference is V Measured in units called Volts (V)  A voltmeter is a device used to measure the amount of electric potential in volts. |
|  |
| **Resistance**  Any device/material that impedes (slows) the flow of electrons in a circuit  Symbol used for resistance is R  Measured in units called Ohms (Ω)  An multimeter is used to measure the resistance across a point in a circuit |

**Current, Potential, Resistance**

**Summary of Electrical Quantities**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Electrical Quantity** | **Symbol for the Quantity** | **Unit Name and Symbol** | **Type of Meter** | **Circuit Symbol for the Meter** |
| Electric Current | I | ampere  A | Ammeter |  |
| Electric Potential | V | volt  V | Voltmeter |  |

Relationship between Voltage (V), Current (I) and Resistance is given by “Ohms Law”

Voltage =Current x Resistance

**V = I x R**

(**Hint:** you could try to use a mnemonic to remember this e.g. I use “**V**olleyball **I**s **R**ough”